



March 7, 2014

Via Electronic Comment Filing System

Ms. Marlene H. Dortch  
Federal Communications Commission  
Office of the Secretary  
445 12<sup>th</sup> Street, SW  
Washington, DC 20554

Re: WC Docket No. 10-90 – Expression of Interest in Conducting Rural Broadband Experiment

Dear Ms. Dortch:

Please find attached a non-binding Expression of Interest (EOI) for Atlantic Engineering Group (AEG) regarding the Connect America Phase II Broadband Experiments. The document has been electronically filed via the Electronic Comment Filing System (ECFS) in compliance with the Federal Communications (FCC) order, FCC 14-5.

AEG appreciated the opportunity to file this EOI and looks forward to answering any questions or concerns you may have.

Kind Regards,

*James H Salter (electronically signed)*

James H. Salter  
President  
Atlantic Engineering Group  
706-654-2298



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**DATE:** Friday, March 7, 2014

**FROM:** James Salter  
Atlantic Engineering Group

**TO:** Federal Communications Commission (FCC) Staff

**SUBJECT:** Expression of Interest – Rural Broadband Trials  
Docket No. 10-90

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### **Background**

Atlantic Engineering Group (AEG) exclusively focuses on the design and construction of Fiber-to-the-Home (FTTH) networks. Headquartered in Braselton, Georgia, AEG is considered by many as a pioneer in rural broadband. Having built the first Municipal Fiber-to-the-Home (FTTH) network in Kutztown, PA in 2001, AEG has now assisted over 35 clients, most of which are Municipal Utilities and Electrical Cooperatives, with the design, construction, operation, and maintenance of their FTTH network. AEG has now constructed over 22,000 miles of fiber optic cable that pass over 750,000 homes in rural America.

Over the years, we have seen what can make or break a successful FTTH deployment and implementation. We have seen many of our clients succeed and several fail miserably. With that being said, one of AEG's core beliefs is that true rural broadband, despite the challenges and risks, will only be realized through grassroots effort. AEG is expressing interest in constructing, owning, and operating a FTTH network in portions of Hall and Jackson County in Georgia where our company and employees call home.

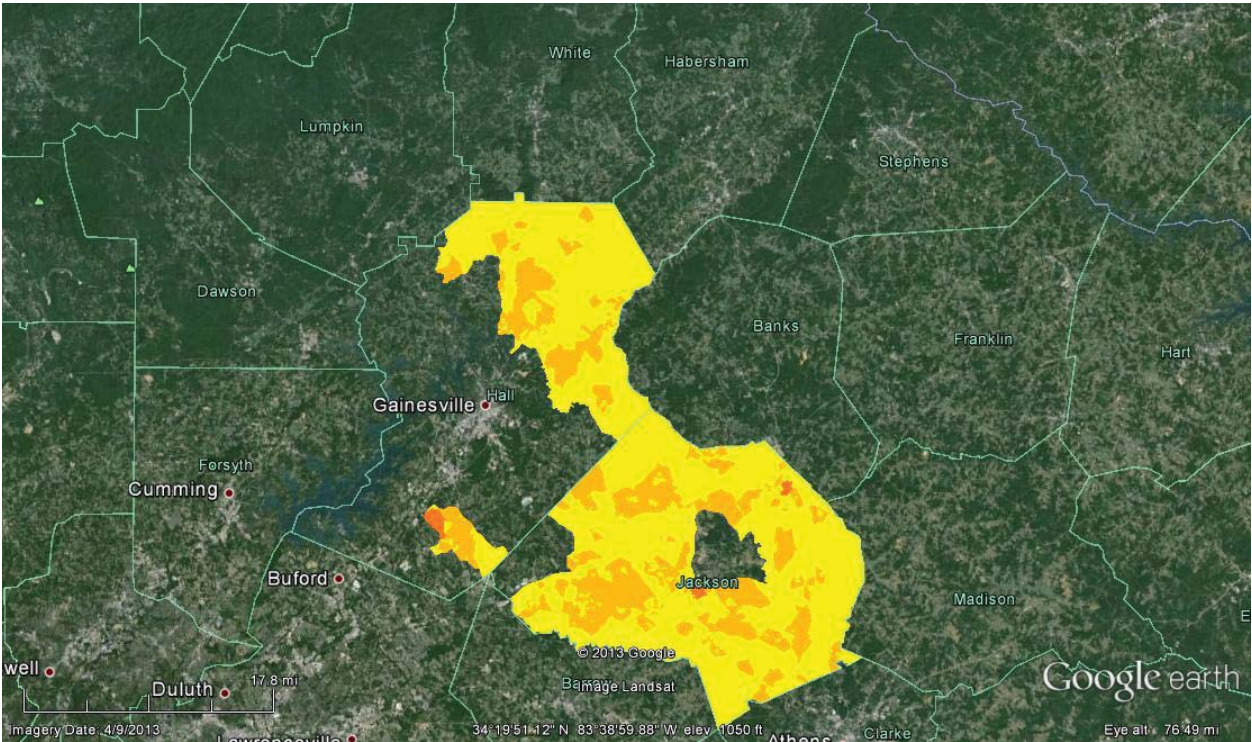
AEG at this time does not have an ETC license, but if funding were to be provided we would meet the requirements set forth by the FCC.

### **Geographic Territory**

AEG is proposing to serve 14 underserved census tracts:

13139000101, 13139000102, 13139000201, 13139000203, 13139001603, 13157010101, 13157010102, 13157010200, 13157010300, 13157010400, 13157010500, 13157010600, 13157010702, 13157010703.

The proposed network will pass approximately 30,000 homes and will require approximately 900 miles of new OSP construction.



### **List of Anchor Institutions**

Schools: There are 27 schools in the proposed serving area.

Libraries: Braselton Library

Government Centers: There are 20 government buildings ranging from fire and police stations to the Jackson County Chamber of Commerce.

Health Centers/Hospitals: Athens Regional Hospital

### **Proposed technology**

We are planning to deploy a Passive Optical Network for residential customers while serving local businesses and anchor institutions with a point-to-point active Ethernet solution. Our offerings will include VOIP, IPTV, and broadband services. While our initial speed offerings have yet to be determined, we anticipate having several tiers of service starting at 15Mbps for \$40 per month. The system will be Gigabit capable and we anticipate offering residential customers the ability to burst to gigabit speeds for those subscribing to the higher tiered service. Anchor institutions will be offered the ability to receive Gigabit connections.

### **State and/or Local or Tribal Government Participation in and/or Support for Project**

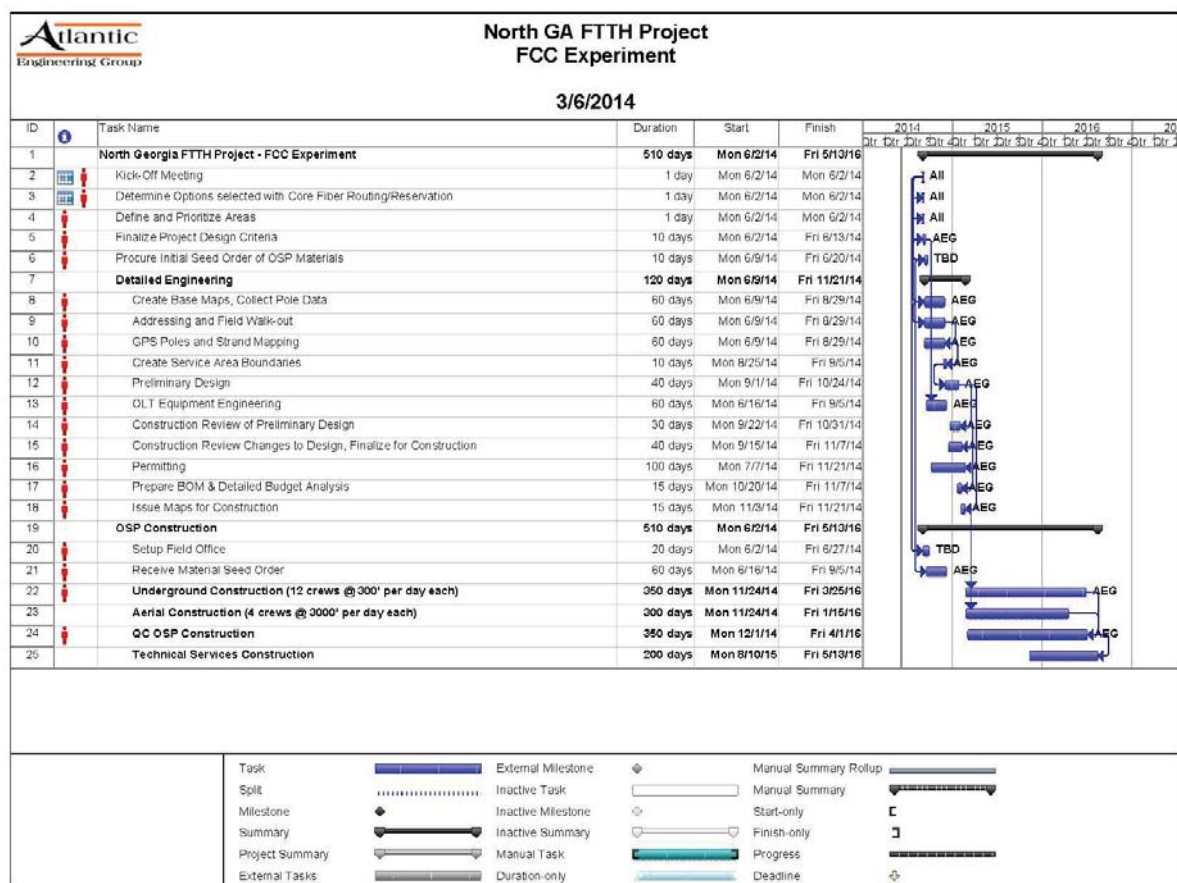
We intend to leverage the local EMC's right of way infrastructure in exchange for use of our network for Smart Grid technologies.

## Existing Providers

There are Price Cap providers that overlap the proposed service territory. They are mostly offering copper based services with varying capabilities depending on the customer's proximity to the DSLAM. In addition, there appears to be lack of investment by the carriers to provide next generation broadband to anchor institutions in Jackson County. Many of the services subsidized by e-rate, for example, remain copper based and are not Gigabit capable. Moreover, business services are also substandard in the proposed service territory and we believe are hindering regional economic growth. As an example, AEG had to recently consider relocation of our Headquarters out of Braselton, GA as our existing carrier couldn't provide the bandwidth required to support the heavy demands of our engineering team. We have since found a solution, but believe the issue may arise as we continue to grow.

## Project Timeline

Upon funding, AEG estimates the project to be completed within 24 months. A high level project timeline for construction is provided below. As with any FTTH project, we believe, pole attachment agreements, make ready construction, and video content acquisition are the 3 items that could potentially impact the proposed schedule.



### **Scalability**

If funding is limited on an annual basis, AEG believes we could use a phased approach to provide broadband service to its 30,000 HHP. We would propose that the project could be done in 10,000 home increments over 3 years, however, a higher percentage of the onetime capital infrastructure investment would have to be provided at the project onset to help offset the fixed capital costs – Headend, satellite farm, softswitch, etc.

### **Total Investment by AEG**

25% or \$14.1M

### **One Time Capital Infrastructure Investment Needed**

75% or \$42.3M

### **Total Project Cost**

\$56.4M